

**Study 4096 - Digest of Welsh Historical Statistics :
Agriculture, 1811-1975**

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PREFACE

In the last couple of decades Welsh historical studies have flourished. The present volume is not offered as part of that very welcome development: it was rather conceived with the more modest aim of providing a service for those working on the history of modern Wales. It arose from a belief that the quantitative element is a necessary and important part of the historical record; from an awareness that it was an aspect that was particularly inaccessible for scholars of Welsh history; and from a conviction that some encouragement in the use of quantitative material was necessary.

It was fortunate that my then colleagues in the Department of Economics at U.C.W. Aberystwyth sufficiently shared my views as to allow me research assistance. I am most grateful to them and also to the Social Science Research Council (as it then was) for funding a research officer. These two institutions generously provided the crucial opportunities.

None the less the vigour with which these opportunities were exploited depended entirely on how effectively the researchers used the couple of years to which funding was limited. In this report I was exceptionally lucky. The two young researchers, Rosemary Oakley (as she then was) and Trevor Boyns, did far more than could reasonably have been asked for them. They were terrier-like in their pursuit of material, meticulously painstaking in its arrangement, careful in indicating its limitations, ingenious in suggesting improvisation, and were enjoyable and stimulating colleagues. Such virtues as the work possesses derives mostly from their efforts and I am conscious that much has been lost because of the necessity to reduce, merge or manipulate much of what they had done.

For a variety of reasons this work has taken a somewhat tortuous path towards publication. It is thus with especial gratitude that I acknowledge the assistance of the Welsh Office in enormously facilitating the final stages. If, as is hoped, the work will be of some use to scholars its appearance owes much to the Welsh Office and to the enthusiastic assistance and support given by Ed Swires-Hennessy, their survey statistician. I am

grateful, too, to John Rhys of the University of Wales Press for his ready acceptance of this arrangement. If the standard of accuracy fails to reach the normal high standards of Welsh Office statistical publications the responsibility is entirely mine; as is the fault for any shortfall from the normal production standards, the copy not having been originally prepared for this form of publication.

Certainly none of the responsibility for any shortcomings would rest with those who have executed a difficult and tedious typing job with remarkable accuracy and cheerfulness. Rosemary Law, Susan Cadman and Pam Davies bore the brunt of this and, in particular, Rosemary Law gave freely of her time and skill in the final substantial task of correcting and adapting the typescript for a different mode of publication. Similarly, Dot Jones has, over a considerable period of time, sunk a great deal of effort into the enterprise not least in the demanding task of checking and preparing the typescript for publication.

GENERAL INTRODUCTION

The task of compiling a set of historical statistics for Wales was one which was undertaken with the greatest reluctance. It was attempted because of the continuous personal frustration induced by lengthy searches for quite basic statistical information. It was attempted because this seemed a general experience amongst those working in Welsh history. It was attempted because the preferred solution to the problem (i.e. that someone else should undertake the task) remained as remote as ever. The reluctance was reinforced by an acute appreciation of the difficulties involved and of being inadequately qualified for the task. Misgivings on these last two counts have mostly been confirmed.

The obvious model for a work of this kind is provided by the two volumes devoted to British historical statistics. (1) The general outline follows the same pattern as the British volumes. Each section has a brief introduction which is intended to provide some explanatory remarks, not on the general subject of the section, but on the particular statistical series which has been provided. These comments will not be, and are not intended to be very helpful to those who are already expert in the given area, but it is hoped that non-specialists will be able to gain some idea of the nature of the sources upon which the tables are based, obtain an indication of the reliability of the figures, and -perhaps most important- be warned about their limitations. Each section also has

a short bibliography, which is largely confined to listing those works which have been of direct use in compiling the tables and/or contain comment upon statistical material. No attempt has been made to provide a bibliography of the numerous more general works which have been consulted: interested readers are referred to the second edition of the Bibliography of the History of Wales published by the University of Wales Press in 1962 and its later supplements.

In some respects substantial effort has been expended in an attempt to follow the model provided by the volumes on British historical statistics as exactly as possible. Naturally it would be pleasing to reach the same standards of accuracy and clarity but, more operationally, the aim was to facilitate comparisons between the figures relating to Britain. The limitations of the material, however, often frustrated such attempts but, beyond this, there are other substantial departures from the model provided by the British volumes. It might help potential users to offer some brief comments on these departures, some of which have been deliberate and some have been more or less involuntary.

The deliberate deviations are of three main kinds. In the first place, a greater attention has been given to statistics of a non-economic, or less explicitly economic nature. This is justified, if justification is needed, by the growth of the new social history and its readiness to use quantitative material and techniques; and by the extent to which economic historians and economist have increasingly recognised that most questions cannot be satisfactorily resolved simply on the basis of a small number of exclusively economic variables. Such recognition has naturally been strongest in the case of relatively long-run issues, where the assumption that 'other things remain equal' becomes increasingly questionable: but part of the justification for a volume such as the present lies precisely in the assistance it can give in tackling issues of relatively long-run nature. In the second place, more detail has sometimes been given than was contained in the British volumes. Thus, for example, a greater range of statistical information is included on the coal industry, because of its peculiar importance for Wales. Conversely, much less information (or none at all) is included for sectors of industries (like cotton manufacture) which were unimportant or non-existent in Wales. And thirdly, substantially more information has been included on a local, and especially a county, basis. For many issues the aggregate figures for Wales, whilst communications

have tended to run east-west, rather than north-south, making Wales less integrated as a national unit. It is hoped that a greater inclusion of information on a county basis will offer investigators more flexibility in using the material.

The involuntary deviations from the British model are more numerous and regrettable. Mostly they arise from the, till recently, deeply-entrenched tendency for administrators (and others) to lump Wales in with England. Scotland and Ireland are usually separately designated but the historical investigator for Wales is perpetually balked by the irritating phenomenon of 'England and Wales'. In some cases it has been possible to separate out the figures for Wales. It would be possible in many other cases to make reasonable estimates for Wales: but, in general, such calculations have not been presented here because of the intention to confine attention, apart from a few indices, to making available raw data. In other cases, the problems seem insurmountable. Thus, any reasonable approximation for the total external trade of Wales seems beyond our reach: the bulk of such trade -imports and exports- was with England and is unrecorded. Other areas are not beyond reach, but would demand a degree of fundamental research which was impossible to undertake with the time and resources available. There is a great deal of empirical evidence concerning prices in Wales. It appears as incidental material in government and other official records and reports, it recurs in a wide variety of farm, business and household accounts and manuscripts; and it appears in a wide range of local newspapers and secondary writings. But it is scattered, patchy, sporadic and unsystematic: substantial and sustained research would be needed to collect and organise it into meaningful economic trends. There is thus no separate section on prices in the present volume, but wherever a reasonably consistent series was available for a particular sector (for coal, for example, and some farm products) it has been included with the other material for that sector. A similar situation exists for wages but it was judged that, despite the gaps and shortcomings, enough usable material existed to justify a separate section (Section 3) especially since good figures exist on the topic for recent years.

The reference to recent years prompts comment upon a number of more general limitations to the present work. The starting date for some of the basic demographic tables is at the beginning of the nineteenth century and a few isolated tables, for example dealing with iron and

coal, lap back into the eighteenth century. But in most areas reasonably consistent and continuous series for Wales can only be obtained from around the middle of the nineteenth century at the earliest. Often the starting-point is much later since the figures are frequently a by-product of two late-flowering processes: the extension of government activity into new areas of social interest, and the pursuit of active regional policies. At the other end of the chronological scale the cut-off date has normally been made around 1974. This marked the re-organization of local government in Wales and it would have been impossible, as well as being historically meaningless, to have converted all the earlier data to coincide with the radically different administrative basis. A related problem concerns the decimilisation of money. Apart from some marginal readjustments in the years immediately around the change-over in 1971, the figures have normally been left as they were originally expressed.

Another significant limitation is that there are occasional gaps and omissions in the tables. For example, table 8 in the section on education gives information on school leavers but there are gaps for 1923 and 1924 because the volume relating for Wales was not published in those years and the department was unable to provide the figures or to give information from which they could be calculated. A number of such gaps have been filled often with the help of the appropriate government department, and most of the remaining gaps of this kind are irritating rather than serious. That they are more or less unavoidable if Wales is the unit arises from the fact, already mentioned, that in some cases the total for Wales can only be obtained by extracting and aggregating more detailed figures; and if the details are not available for any particular year no total can be provided. It is this aspect which largely accounts for the two more serious periods of omission covering the two world wars. Very little was published on a county or regional basis during these periods, and the level of detail required it seems that much of the necessary information was either not collected at all or has not been retained.

A more general point concerns the kind of statistics which have been on the collection of 'raw' statistics. In general, therefore, the aim has been to avoid processing or manipulating the basic data in order to construct indices of various kinds or to convert the collected figures into indicators of concepts (like national income) for which no consciously-constructed contemporary

figures exist. Of course, it is not meant to imply by this that each statistic given existed in exactly that form in the original document or report from which it was constructed. On the contrary, one of the persistent obstacles to be overcome was that there was no figure for Wales directly available. In many cases such a figure was only reached by summing up figures which could be obtained for, say, each Welsh county, or -to cite a particularly tricky case- each Welsh railway (raising the ultimately unanswerable question of 'What is a Welsh railway?'). Where any substantial aggregation of this sort has been undertaken it has been noted in the introduction to the particular section since it obviously involves an additional source of possible error. But the general point remains: the statistics have not normally been processed in a way which would alter their original form. It was felt that the over-riding priority was to present the basic figures: partly, indeed, to provide material but part of the motivation for, and justification of, such enterprises was precisely to aid - and perhaps even encourage those who wish to process the statistics, and adapt them so that a wider range of social and economic concepts can be brought to bear upon Welsh history.

Notes

1. Mitchell, B. R. and Deane, P., *Abstract of British Historical Statistics*, 1962; and Mitchell, B. R. and Jones, H. G., *Second Abstract of British Historical Statistics*, 1971.

Chapter 4. AGRICULTURE.

The starting point for any enquiry into agriculture and especially into agricultural statistics, for Wales is the work of Ashby and Evans¹. The present study makes wide use of the material collected by them, but also aims to extend their efforts in two main respects. The obvious extension is chronological and the direction of this is mostly forwards. In general the statistical tables presented by Ashby and Evans have been carried forwards for a further three and a half decades. There are also some cases where the tables have been backwards in time. The other major extension has been to include some topics on which Ashby and Evans presented no series specifically relating to Wales. The most obvious examples concern farm machinery and the prices in Wales of some agricultural products.

Whether the purpose has been to check, to supplement or to extend the findings of Ashby and Evans, the major source has been the official agricultural statistics. These, after a series of false starts, date from 1867 as a continuous and effective series. Not all the information can be taken back over the whole period since there was a natural tendency to add extra items from time to time. In addition, too, the accuracy of the figures for earlier years suffers a combination of initial incompetence, distrust of the objectives of the exercise by many farmers and a lack of uniformity over the interpretation of the questions. These defects dwindled over time and this process was probably aided by the gradual exclusion of the tiniest holdings² where such attitudes and sources of error were likely to be most persistent. The exclusion of such very small-scale producers would not, moreover, have greatly affected total acreage output figures and hence do not significantly reduce the comparability of the series over time. Such comparability is greatly enhanced by the fact that the questions in the agricultural census relate to the same date, 4th June, in each year.

There are significant differences between agricultural practice and performance in different parts of the country. For this reason, and because they are conveniently available over a long period of time, several of the basic tables give figures (quinquennially, at least) for each county as well as an annual for Wales

¹ A.W. Ashby and I.L. Evans, *The Agriculture of Wales and Monmouthshire*, Cardiff, 1944.

² From 1869 information was not required from holdings of less than a quarter-acre, and from 1893 holdings of less than an acre were excluded.

as a whole. This is the case for acreage of crops (Tables 1 and 2)³; numbers of livestock (Tables 3 and 4); size of holdings (Tables 7 and 8); the number of workers (Tables 9 and 10). The first four tables thus indicate the response of farmers in Wales to changing circumstances by giving the broad shifts in the production mix. Such shifts have to be interpreted with some caution, of course because of such consideration as changes in quality, and even of function, which can be disguised under unchanging names. Thus, for example, the total number of cattle in Wales in 1939 was almost exactly the same as in 1919, but these years also saw a significant increase in the proportional importance of the breeding of the dairy herd. In the case of crops in general an additional indication of these relative shifts is obtained from estimates of the production and yields for the principle crops shown in tables 5 and 6. These estimates, however, mostly derive from the assessments made by local crop reporters whose judgements are, despite their experience and local knowledge, naturally fallible.

The information on agricultural prices (Table 11) is not drawn directly from official sources but comes from the work of David Jones and, especially, the comprehensive thesis of David Howell⁴, who also generously made available his primary notes. Much more work of this careful and painstaking nature is needed before any reliable and comprehensive price indices for Wales can be compiled. Table

12 gives information on agricultural machinery in Wales over the last 30 years or so, and because of their relative importance for Welsh farming in recent generations separate figures are also included (Table 13) for milk producers. Tables 14 and 15 offer some statistics on fishing and forestry, activities normally closely associated with agriculture for census and administrative purposes. The fishing figures, especially, in the early years, are more fully reliable. This was partly because they do not always cover the same number of ports, although this was probably not a serious source of error because the bigger ports were always included. Much more significant for the very early years was the clear deficiency in the reporting. The 1887 report, for example, commented that: there is no doubt, however, that

³ It was hoped to extend the information on crop acreage's by including information from the acreage returns which the government attempted to collect in 1800-1 during the Napoleonic wars. In fact, however, the data then collected is far from comprehensive (in the case of most counties only a small number of parishes are included) and is also of dubious reliability. It was considered, therefore, that its inclusion would be more mis-leading than helpful.

⁴ D.J.V. Jones, *Before Rebecca*, 1973; D.W. Howell, 'Welsh Agriculture, 1815-1914', Ph.D. thesis, London, 1970.

the collection in 1887 has been rather better than in the former years, the officers having had more experience. But until the system of collection has been longer at work it would be premature to draw conclusions as to the productiveness of the fisheries from year to year'⁵. Similarly, the early figures on forestry are unsatisfactory because they are only available for a few scattered years and even then offer only the barest information.

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